

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A bi-directional access point comprising:
 - an interface section comprising a bridging connection positioned midstream along for a bi-directional communication path, and an interface output connection;
 - an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and
 - an access connection point coupled to the transformer point tap output.
2. (original) A bi-directional access point according to claim 1, wherein the impedance boosting section comprises a transformer winding with a winding tap.
3. (original) A bi-directional access point according to claim 2, wherein the transformer winding comprises N1 turns about the winding tap and N2 turns below the winding tap, where $N1 > N2$.
4. (original) A bi-directional access point according to claim 3, wherein $N1/N2$ is selected from a range of 2 through 6 commensurate with a preselected tap value ranging between -10 dB and -30dB.
5. (original) A bi-directional access point according to claim 4, wherein $N1/N2$ is 6 and the preselected tap value is -30 dB.
6. (original) A bi-directional access point according to claim 4, wherein $N1/N2$ is 3 and the preselected tap value is -20dB.
7. (original) A bi-directional access point according to claim 1, wherein the interface section is a resistive interface section.

8. (original) A bi-directional access point according to claim 1, wherein the interface section is a resistive interface section comprising at least first and second resistors in series.
9. (original) A bi-directional access point according to claim 1, further comprising a tuning section for the access connection point.
10. (original) A bi-directional access point according to claim 9, wherein the tuning section comprises a resistive network.
11. (currently amended) A method for monitoring a bi-directional communication path, the method comprising:

establishing a bridging connection from a position midstream along a bi-directional communication path through an interface section to an interface output connection;

providing an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and

providing an access connection point to the access point tap output.

12. (original) A method according to claim 11, wherein providing an impedance boosting section comprises providing a transformer winding with a winding tap.
13. (original) A method according to claim 12, wherein providing a transformer winding comprises providing a transformer winding with N1 turns above the winding tap and N2 turns below the winding tap, where N1 < N2.
14. (original) A method according to claim 13, wherein providing a transformer winding comprises providing a transformer winding in which N1/N2 is selected from a range of 2 through 6 commensurate with a preselected tap value ranging between -10 dB and -30 dB.
15. (original) A method according to claim 14, wherein N1/N2 is 3 and the preselected tap value is -20 dB.

16. (original) A method according to claim 14, wherein N1/N2 is 6 and the preselected tap value is -30 dB.
17. (original) A method according to claim 11, wherein establishing a bridging connection comprises establishing the bridging connection through a resistive interface section.
18. (currently amended) A method according to claim 11, further comprising providing a tuning section coupled to the access connection point.
19. (currently amended) A bi-directional access point comprising:
 - interface means for establishing a bridging connection positioned midstream along from a bi-directional communication path to an interface output connection;
 - impedance boosting means coupled to the interface output connection for adding an impedance boost in series with the interface means;
 - a transformer tap output coupled to the impedance boosting means; and
 - an access connection point coupled to the transformer tap output.
20. (original) A bi-directional access point according to claim 19, wherein the impedance boosting means includes a transformer winding with a winding tap.
21. (original) A bi-directional access point according to claim 20, further comprising tuning means for establishing at least one of a predetermined return loss and tap value for the access connection point.
22. (original) A bi-directional access point according to claim 20, wherein the impedance boost is commensurate with a preselected tap value ranging between -10 dB and -30dB.
23. (original) A bi-directional access point according to claim 22, wherein the impedance boost is commensurate with a tap value of -30 dB.
24. (original) A bi-directional access point according to claim 22, wherein the impedance boost is commensurate with a tap value of -20dB.

25. (new) A bi-directional access point comprising:

an interface section comprising a bridging connection for a bi-directional communication path, and an interface output connection;

an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and

an access connection point coupled to the transformer point tap output,

wherein the impedance boosting section comprises a transformer with a winding tap, and further wherein the transformer winding comprises N1 turns about the winding tap and N2 turns below the winding tap, where $N1 < N2$.

26. (new) A bi-directional access point according to claim 25, wherein $N1/N2$ is selected from a range of 2 through 6 commensurate with a preselected tap value ranging between -10 dB and -30dB.

27. (new) A bi-directional access point according to claim 26, wherein $N1/N2$ is 6 and the preselected tap value is -30 dB.

28. (new) A bi-directional access point according to claim 26, wherein $N1/N2$ is 3 and the preselected tap value is -20dB.

29. (new) A bi-directional access point comprising:

an interface section comprising a bridging connection for a bi-directional communication path, and an interface output connection;

an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and

an access connection point coupled to the transformer point tap output,

wherein the interface section is a resistive interface section.

30. (new) A bi-directional access point according to claim 29, wherein the interface section is a resistive interface section comprising at least first and second resistors in series.

31. (new) A method for monitoring a bi-directional communication path, the method comprising:

establishing a bridging connection from a bi-directional communication path through an interface section to an interface output connection;

providing an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and

providing an access connection point to the access point tap output.

wherein providing an impedance boosting section comprises providing a transformer winding with a winding tap, and further wherein providing a transformer winding comprises providing a transformer winding with N_1 turns above the winding tap and N_2 turns below the winding tap, where $N_1 < N_2$.

32. (new) A method according to claim 31, wherein providing a transformer winding comprises providing a transformer winding in which N_1/N_2 is selected from a range of 2 through 6 commensurate with a preselected tap value ranging between -10 dB and -30 dB.

33. (new) A method according to claim 32, wherein N_1/N_2 is 3 and the preselected tap value is -20 dB.

34. (new) A method according to claim 32, wherein N_1/N_2 is 6 and the preselected tap value is -30 dB.

35. (new) A method for monitoring a bi-directional communication path, the method comprising:

establishing a bridging connection from a bi-directional communication path through an interface section to an interface output connection;

providing an impedance boosting section coupled to the interface output connection, the impedance boosting circuit including a transformer tap output; and
providing an access connection point to the access point tap output,
wherein establishing a bridging connection comprises establishing the bridging connection through a resistive interface section.

36. (new) A bi-directional access point comprising:

interface means for establishing a bridging connection from a bi-directional communication path to an interface output connection;
impedance boosting means coupled to the interface output connection for adding an impedance boost in series with the interface means;
a transformer tap output coupled to the impedance boosting means;
a tuning means for establishing at least one of a predetermined return loss and tap value for the access connection point; and
an access connection point coupled to the transformer tap output,
wherein the impedance boosting means includes a transformer winding with a winding tap.

37. (new) A bi-directional access point comprising:

interface means for establishing a bridging connection from a bi-directional communication path to an interface output connection;
impedance boosting means coupled to the interface output connection for adding an impedance boost in series with the interface means;
a transformer tap output coupled to the impedance boosting means; and
an access connection point coupled to the transformer tap output,

wherein the impedance boost is commensurate with a preselected tap value ranging between -10 dB and -30dB.

38. (new) A bi-directional access point according to claim 37, wherein the impedance boost is commensurate with a tap value of -30 dB.

39. (new) A bi-directional access point according to claim 22, wherein the impedance boost is commensurate with a tap value of -20dB.